AMENDMENT

A Version With Markings To Show Changes Made is included after Applicant's Remarks.

In the Specification:

At page 1, line 2, after the Title, please insert the following continuing data paragraph:



--This application is a division of U.S. Serial No. 09/399,212 filed September 17, 1999, Now abandoned, and is further related to U.S. Serial No. 09/898,200, filed July 2, 2001, which is a division of U.S. Serial No. 09/399,212.--.

At page 1, line 4, after the Statement of "Government License Rights", please delete the entire continuing data paragraph before "Background of the Invention."

At page 11, lines 17-19, please delete the paragraph, and insert the following paragraph therefor:



--Figure 2 shows a genetic map of the bm region of mouse chromosome 19. The 0.7 cM interval containing the disease gene and locus *D19Mit13* is shown with a darker line; nucleotide sequence of the *D19Mit13* locus and flanking sequences are shown in SEQ ID NO:29.--

At page 11, lines 20-25, please delete the paragraph, and insert the following paragraph therefor:

--Figure 3 shows a variant allele of PAPSS2 associated with SEMD Pakistani type. Sequences derived from amplified DNA fragment from an affected family member (SEMD) and from a control (NL) are shown. An arrow at nucleotide +1424 marks the location of a mutation, and the DNA sequence and the implied effect of the mutation on the PAPSS2 protein sequence is summarized below the nucleotide sequence. "Normal" shows nucleotide positions +1414 through +1431 of the PAPSS2 coding sequence (SEQ ID NO:30), with the corresponding amino acid sequence (SEQ ID NO:31) directly underneath. "SEMD" shows nucleotide positions +1414 through +1431 of the PAPSS2 coding sequence containing the mutation at nucleotide position +1424 (SEQ ID NO:32) that produces a TAA stop codon, with the corresponding amino





acid-sequence (SEQ ID NO:33) directly underneath; "X" indicates truncation of the PAPSS2 protein after amino acid residue 474 of SEQ ID NO:7.--.

At page 12, lines 1-3, please delete the entire paragraph.

At page 12, lines 4-9, please delete the entire paragraph.

REMARKS

The amendments at page 1, lines 2 and 4 are to (a) update the continuing data by inserting the serial number of related division 09/898,200, filed simultaneously with the above captioned application on July 2, 2001 and by updating concerning the abandonment of parent application 09/399,212; and (b) place the continuing data before the Statement of "Government Licence Rights" in compliance with MPEP 310.

The amendment at page 11, line 19 is to insert recitation and brief description of SEQ ID NO:29. Support is found in the specification, e.g., in Figures 2, and at page 48, lines 14-24.

The amendment at page 11, line 25 is to insert recitation and brief description of SEQ ID NOS:30-33. Support is found in the specification, e.g., in Figure 3, at page 37, lines 7-24, and at page 49, line 25 through page 50, line 9.

The amendments at page 12, lines 1-9 is to delete the two redundant paragraphs that are duplicative of page 11, lines 17-25.

The amendments submitted herein contain no new matter.

Respectfully submitted,

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